Designation of Deemed Points of Receipt (POR) and Points of Delivery (POD) for Short-Term Firm Transmission Requests

As part of the draft proposal on Short-Term Firm (STF) ATC, TBL is proposing changes to how it processes STF requests to more closely resemble its method of processing Long-Term Firm (LTF) requests. These changes will allow TBL to do a Path Utilization Factors (PUFs) analysis of a request's impact on a Network flowgates (as is currently done for LTF requests). For STF requests, TBL proposes to assign or "deem" a bus-level POR/POD based to the system level POR/POD supplied by the customer. The proposed "Deemed POR/POD" method will enable TBL to better measure impacts of new STF requests across Network Flowgates.

Calculation of Flowgate Impacts

Flowgate impacts are calculated by the following equation:

*Impact to Flowgate = (Bus Point 1 PUF for Flowgate – Bus Point 2 PUF for Flowgate) * Demand (in MW)*

STF requests are not currently submitted with the same level of detail provided with LTF requests. Customers submitting STF requests do not supply the TBL with bus-level POR/PODs (such as Bell 230 kV or Alvey 230 kV), but rather with system-level POR/PODs (such as AVA.BPAT or EWEB). That will not change. However, since PUFs must be calculated based on bus-level information, TBL proposes to deem a bus-level POR/POD for each system-level POR/POD by designating the equivalent bus-level POR/POD for the purposes of PUF analysis. This analysis will be used to determine whether ATC is available to provide the requested STF service.

Following are two examples using the West of McNary Flowgate. The first example represents how we currently process LTF requests under the LTF ATC Methodology, and the second represents how TBL proposes to "deem" bus-level PORs and PODs to analyze ATC for STF requests.

Example 1: Calculation of LTF impact to West of McNary (WoM) Flowgate:

- LTF POR = Bus Point 1 = Bell 230 kV
- LTF POD = Bus Point 2 = Alvey 230 kV
- Bus Point 1 PUF for WoM = 0.067
- Bus Point 2 PUF for WoM = -0.135
- Demand = 100 MW

Putting the above information into the "Impact to Flowgate" equation results as:

*Impact to WoM = (Bus Point 1 PUF – Bus Point 2 PUF) * Demand*
= (0.067 – (-0.135)) * 100 MW
= (0.067 + 0.135) * 100 MW
= 0.202 * 100 MW
= 20.2 MW
= 20 MW of impact on WoM ATC(after rounding)

If this were a LTF request, 20 MW would be compared to the LTF ATC across WoM.

Example 2: Proposed calculation of STF impact to West of McNary (WoM) Flowgate:

- Flowgate = West of McNary (WoM)
- STF POR = System Point 1 = AVA.BPAT (*Deemed as Bell 230 kV*)
- STF POD = System Point 2 = EWEB (*Deemed as Alvey 230 kV*)
- *Deemed* Bus Point 1 PUF = 0.067
- *Deemed* Bus Point 2 PUF = -0.135
- Demand = 100 MW

*Impact to WoM = (Deemed Bus Point 1 PUF – Deemed bus point 2 PUF) * Demand*
= (0.067 – (-0.135)) * 100 MW
= (0.067 + 0.135) * 100 MW
= 0.202 * 100 MW
= 20.2 MW
= 20 MW of impact on WoM ATC (after rounding)

If this were a STF request, 20 MW would be compared to the STF ATC across WoM.

Explaining Assigned PUFs

Path Utilization Factors (PUFs) are the basis for the determination of Network Long-term Firm Available Transmission Capacity (LTF ATC) and the impacts of new LTF requests on the ATC for managed Network paths. PUFs are calculated for each bus and each Flowgate.

Attached is a spreadsheet with several commonly used STF POR/PODs (referred to as "System Points" in the spreadsheet) and the LTF POR/PODs (referred to as "*Deemed* Bus Points" in the spreadsheet) that TBL proposes to use to represent the corresponding system. These LTF points were chosen due to several factors: being electrically central to the system in question, being a major interface between TBL and the system in question, and representing a large portion of either the load or the generation for the system in question. You'll notice that some of the System Points have been listed twice as both a POR and a POD with differing *Deemed* Bus Points; this is due to the fact that load and generation for each system are generally concentrated in different locations. The PUF values used for the "BPAPower" System Point (deemed to be equivalent to the "Weighted FCRTS" Bus Point) are the same as those used for the month of July in the Network LTF ATC methodology, which assumes a specific generation dispatch pattern for each month.

If you have any questions on the issue or the associated process, please contact your transmission account executive. **All comments to the TBL proposal should be submitted to atc@bpa.gov.** Participation in the April 13, 2004 workshop is highly desired to ensure that TBL is aware of the needs and ideas of those affected by BPA's STF ATC practices.